

10/009224

3 Rec'd PCT/PTO 08 NOV 2001

UNITED STATES PATENT AND TRADEMARK OFFICE

Examiner:

Group:

Attorney Docket # 1813

Applicant(s) : KOPF, F.

Serial No. :

Filed :

For : DEVICE FOR SECURING AN ADD-ON PART TO  
A SUBSTANTIALLY SMOOTH DRIVE SHAFT

SIMULTANEOUS AMENDMENT

November 7, 2001

Honorable Commissioner of Patents and Trademarks  
Washington, D.C. 20231

S I R S:

Simultaneously with filing of the above identified application  
please amend the same as follows:

In the Claims:

Cancel all claims without prejudice.

Substitute the claims attached hereto.

REMARKS:

This Amendment is submitted simultaneously with filing of the above identified  
application.

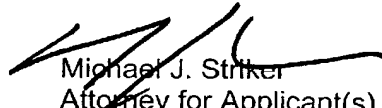
With the present Amendment applicant has amended the claims so as to eliminate  
their multiple dependency.

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Consideration and allowance of the present application is most respectfully requested.

Respectfully submitted,

  
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Attorney for Applicant(s)  
Reg. No. 27233

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## Claims

1. A device for securing an add-on part (10) to a  
5 substantially smooth drive shaft (12), having a slaving element  
(14), which is seated in a manner fixed against relative rotation  
on the drive shaft (12) and transmits a rotary motion from the  
drive shaft (12) to the add-on part (10), and having a spring  
10 element (16), which axially secures the add-on part (10) on the  
drive shaft (12), characterized in that the slaving element (14)  
penetrates the add-on part (10), and the spring element (16) is  
braced on the one hand on the slaving element (14) and on the  
other on the add-on part (10) and thus axially fixes the add-on  
part (10).

2. The device of claim 1, characterized in that the add-on  
part (10) is clamped between the spring element (16) and a  
portion of the slaving element (14).

3. The device of [one of claims 1 or 2] claim 1,  
characterized in that the spring element (16) is embodied in one  
piece.

4. The device of [one of claims 1-3] claim 1,  
25 characterized in that the slaving element (14) has a collarlike  
widening (18), on which the spring element (16) is braced.

5. The device of claim 4, characterized in that the add-on  
part (10) has recesses (40), through which the slaving element  
30 (14) can be passed with its collarlike widening (18).

6. The device of [one of claims 1-5] claim 1,

characterized in that the add-on part (10) has positive engagement with the slaving element (10) and in particular embraces it by positive engagement.

5           7. The device of [one of claims 1-6] claim 1, characterized in that the slaving element (14) has a platelike widening (20) of its diameter, at which the add-on part (10) is braced.

10           8. The device of claim 7, characterized in that in the platelike widening (20), the slaving element (14) has recesses (42) corresponding to the location of the collarlike widening (18).

15           9. The device of [one of the foregoing claims] claim 1, characterized in that the spring element (16) is a circular cup spring (C-clip) that is open on one side.

20           10. The device of [one of claims 1-9] claim 1, characterized in that the spring element (16) is secured on the add-on part (10) against later twisting by means of a positioning pin (48).

25           11. The device of [one of the foregoing claims] claim 1, characterized in that the add-on part (10) to be secured is a vane wheel of a fan.

30           12. The device of [one of the foregoing claims] claim 1, characterized in that the slaving element (14) is press- fitted onto the drive shaft (12).

## Claims

1. A device for securing an add-on part (10) to a  
5 substantially smooth drive shaft (12), having a slaving element  
(14), which is seated in a manner fixed against relative rotation  
on the drive shaft (12) and transmits a rotary motion from the  
drive shaft (12) to the add-on part (10), and having a spring  
10 element (16), which axially secures the add-on part (10) on the  
drive shaft (12), characterized in that the slaving element (14)  
penetrates the add-on part (10), and the spring element (16) is  
braced on the one hand on the slaving element (14) and on the  
other on the add-on part (10) and thus axially fixes the add-on  
part (10).

2. The device of claim 1, characterized in that the add-on  
part (10) is clamped between the spring element (16) and a  
portion of the slaving element (14).

3. The device of claim 1, characterized in that the spring  
element (16) is embodied in one piece.

4. The device of claim 1, characterized in that the  
slaving element (14) has a collarlike widening (18), on which the  
25 spring element (16) is braced.

5. The device of claim 4, characterized in that the add-on  
part (10) has recesses (40), through which the slaving element  
(14) can be passed with its collarlike widening (18).

6. The device of claim 1, characterized in that the add-on  
part (10) has positive engagement with the slaving element (10)

and in particular embraces it by positive engagement.

7. The device of claim 1, characterized in that the  
slaving element (14) has a platelike widening (20) of its  
5 diameter, at which the add-on part (10) is braced.

8. The device of claim 7, characterized in that in the  
platelike widening (20), the slaving element (14) has recesses  
10 (42) corresponding to the location of the collarlike widening  
(18).

9. The device of claim 1, characterized in that the spring  
element (16) is a circular cup spring (C-clip) that is open on  
one side.

10. The device of claim 1, characterized in that the  
spring element (16) is secured on the add-on part (10) against  
later twisting by means of a positioning pin (48).

11. The device of claim 1, characterized in that the add-  
on part (10) to be secured is a vane wheel of a fan.

12. The device of claim 1, characterized in that the  
slaving element (14) is press- fitted onto the drive shaft (12).